PMC-EF2a

2.04.02

# U.S. DEPARTMENT OF ENERGY EERE PROJECT MANAGEMENT CENTER NEPA DETERMINATION



RECIPIENT: Board of Regents, NSHE, on behalf of UNR

STATE: NV

PROJECT

Characterizing Structural Controls of EGS-Candidate and Conventional Goethermal Reservoirs in the

TITLE:

Great Basin: Developing Successful Exploration Strategies in Extended Terranes

Funding Opportunity Announcement Number

DE-EE0002748

Procurement Instrument Number NEPA Control Number CID Number

GFO-10-154

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Order 451.1A), I have made the following determination:

### CX, EA, EIS APPENDIX AND NUMBER:

#### Description:

- Information gathering (including, but not limited to, literature surveys, inventories, audits), data analysis (including A9 computer modeling), document preparation (such as conceptual design or feasibility studies, analytical energy supply and demand studies), and dissemination (including, but not limited to, document mailings, publication, and distribution; and classroom training and informational programs), but not including site characterization or environmental monitoring.
- B3.1 Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (abandonment) of characterization and monitoring devices and siting, construction, and associated operation of a small-scale laboratory building or renovation of a room in an existing building for sample analysis. Activities covered include, but are not limited to, site characterization and environmental monitoring under CERCLA and RCRA. Specific activities include, but are not limited to:

#### Rational for determination:

Board of Regents, Nevada System of Higher Education (NSHE), on behalf of University of Nevada, Reno (UNR) would characterize the structural controls of Enhanced Geothermal Systems (EGS) Candidate and conventional geothermal reservoirs in the Great Basin. The field work would take place in Eastern, Central, and Western Nevada. The lab work would take place at UNR in Reno, Nevada. The project would be divided into 12 tasks:

PHASE 1 (YEAR 1) REGIONAL ASSESSMENT

Task 1 Structural Inventory

Task 2 Define Favorable Structural Settings/Preliminary Structural Catalogue

Task 3 Regional Slip Tendency Analysis

PHASE 2 (YEAR 2) DETAILED INVESTIGATIONS

Task 4 Selection of Sites for Detailed Studies

Task 5 Detailed Studies

Task 6 Develop and Teach Geothermal Exploration Seminar

## PHASE 3 (YEAR 3) DETAILED INVESTIGATIONS AND SYNTHESIS

Task 7 Completion of Detailed Studies at Representative Sites

Task 8 Comparative Analysis

Task 9 Completion of Structural Catalogue

Task 10 Development of Exploration Strategies

Task 11 Project Management and Reporting

Task 12 Technology Transfer/Commercialization

UNR claims no additional permits are needed and there would be no generation of air emissions associated with this work. Vented gas cabinets and fumehoods are used with scrubbers to prevent release of air pollutants. The university claim that all hazardous waste is disposed of according to university, local, state, and federals regulations. According to the university, a Chemical Hygiene Plan, waste disposal, and safety protocols are in place monitored by the each university Environmental Health and Safety Department.

This proposal comprises conventional laboratory operations, site characterization, and data gathering/analysis; therefore this project is categorized as CX A9 and B3.1.

## NEPA PROVISION

DOE has made a final NEPA determination for this award	
Insert the following language in the award:	
Note to Specialist:	
ing Structural Controls of EGS-Candidate and Conventional Goethermal Res. neviD enoNet Developing Successful Exploration Strategies In Extended Terranea	
SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.  NEPA Compliance Officer Signature:  NEPA Compliance Officer	Date: 01 28 2010
☐ Field Office Manager review required *** *** *** *** *** *** *** *** *** *	
NCO REQUESTS THE FIELD OFFICE MANAGER REVIEW FOR THE FOLLOWING REAS	ON:
<ul> <li>□ Proposed action fits within a categorical exclusion but involves a high profile or controversial issue Manager's attention.</li> <li>□ Proposed action falls within an EA or EIS category and therefore requires Field Office Manager's response to the proposed action falls within an EA or EIS category and therefore requires Field Office Manager's response to the proposed action falls within an EA or EIS category and therefore requires Field Office Manager's response to the proposed action falls within an EA or EIS category and therefore requires Field Office Manager's response to the proposed action falls within an EA or EIS category and therefore requires Field Office Manager's response to the proposed action falls within an EA or EIS category and therefore requires Field Office Manager's response to the proposed action falls within an EA or EIS category and therefore requires Field Office Manager's response to the proposed action falls within an EA or EIS category and the proposed action falls within an EA or EIS category and the proposed action falls within an EA or EIS category and the proposed action falls within an EA or EIS category and the proposed action falls within an EA or EIS category and the proposed action falls within an EA or EIS category and the proposed action falls within a category and the proposed action falls with</li></ul>	
BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO:	
Field Office Manager's Signature:	Date:
	Task 5 Develop and Tea PHASE 1 (YEAR 3) DET Task 7 Completion of De Task 9 Completion And Task 10 Development of